DOD Alternative Fuels: Policy, Initiatives and Legislative Activity

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Summary

This report provides background information and identifies issues for Congress regarding Department of Defense (DOD) alternative fuel initiatives, a subject of debate at congressional hearings on DOD's proposed FY2013 budget. The services (the Army, Navy, and Air Force) have spent approximately $48 million on alternative fuels, and the Navy has proposed a $170 million investment in biofuel production capacity. By comparison, DOD purchases of petroleum fuels totaled approximately $17.3 billion in FY2011.

DOD officials have said that any alternative fuels for DOD operational use must:

- be "drop-in;" that is, requiring no modification to existing engines;
- be cost-competitive with conventional petroleum fuels;
- be derived from a non-food crop feedstock; and
- have lifecycle greenhouse gas emissions less than or equal to conventional petroleum fuels.

Each military service has different alternative fuel goals. The Army has the broad aim of increasing the use of renewable energy, but has not adopted any specific alternative fuel goals. The Air Force goals are to test and certify all aircraft and systems on a 50:50 alternative fuel blend by 2012, and to be prepared to acquire 50% of the Air Force's domestic aviation fuel as an alternative fuel blend by 2016. The Navy's goals are to deploy a "Great Green Fleet" strike group of ships and aircraft running entirely on alternative fuel blends by 2016 and to meet 50% of the Navy's total energy consumption from alternative sources by 2020. To meet this goal for its ships, the Navy would need to replace approximately 8 million barrels of petroleum used in its ships with unblended alternative fuels by 2020.

Under the authority of the Defense Production Act, the Navy has also entered into a Memorandum of Understanding (MOU) with the Department of Energy and the Department of Agriculture to promote the development of a domestic advanced biofuel industry through the construction of domestic biofuel plants and refineries. The Navy, the Department of Energy, and the Department of Agriculture plan to fund this initiative with $510 million in federal funds for capital investment and production, with at least equal cost-sharing from industry.

Legislative debate in 2012 related to DOD's alternative fuels efforts has focused on two areas: (1) proposals in the National Defense Authorization Act for FY2013 (H.R. 4310, S. 3254) to maintain or limit DOD's ability to purchase alternative fuels and invest in biofuel production capability, and (2) appropriations related to the joint Navy, Department of Energy, and Department of Agriculture biofuel production initiative.

Additional areas for potential congressional oversight include the costs and benefits to DOD of alternative fuels, as well as the coordination of alternative fuel initiatives within the services and between DOD and other federal agencies.

Contents

Introduction 1
DOD Alternative Fuels Policy 1
Policy Goals 2
Investments in Alternative Fuels 2
Service Goals for Use of Alternative Fuels 3
DOD Alternative Fuel Purchases 4
Alternative Fuels Testing and Evaluation 5
Army 5
Air Force 6
Navy 6
Navy Biofuel Production Under the Defense Production Act 6
Funding Opportunity Announcement 7
Legislative Activity in 2012 9
Exempting DOD from Section 526 of EISA 2007 10
Prohibition on Procuring or Producing Alternative Fuel that is more Costly than Conventional Fuel 10
Prohibition on DOD Investment in Biofuel Refineries 10
DOD and DOE Appropriations for Biofuels Production Initiative 11
Questions for Congress 11
Benefits and Costs of Alternative Fuels 11
Navy Role in Developing Advanced Biofuels 12
DOD Coordination of Service Alternative Fuel Initiatives 12
Coordination of Alternative Fuel Initiatives between DOD and Other Federal Agencies 12

Tables

Table 1. Alternative Fuels Purchases by Service, 2007-November 2012 4
Table 2. Alternative Fuel Purchases by Fuel Type, 2007-November 2012 5
Table 3. Funding Sources for the Navy, DOE and USDA Biofuel Production Initiative 8
Table A-1. DOD Alternative Fuel Contracts, 2007-November 2012 13

Appendixes

Appendix A. DOD Alternative Fuel Contracts to Date 13
Appendix B. Recent Legislative Action 15

Contacts

Author Contact Information 19

Introduction

This report provides background information and identifies issues for Congress regarding Department of Defense (DOD) alternative fuel initiatives, an issue of considerable attention during hearings in 2012 on DOD's FY2013 budget. Ongoing alternative fuel efforts of the DOD and the military services include purchases of alternative fuels for testing and evaluation, as well as the certification of alternative fuels for use in service fleets. In addition, the Navy, in coordination with the Department of Energy and the Department of Agriculture, intends to spur domestic advanced biofuel production at a commercial scale using the authority of the Defense Production Act. The services (Army, Navy, and Air Force) have spent approximately $48 million on alternative fuels, and the Navy has proposed a $170 million investment in biofuel production capacity. By comparison, DOD purchases of petroleum fuels totaled approximately $17.3 billion in FY2011.

This report provides a brief overview of DOD alternative fuels policy and data on DOD's alternative fuels purchases to date, as well as the status of testing platforms on alternative fuel blends and the certification of those blends for fleet-wide use within the services. This report also discusses the current status of the Navy's biofuel production initiative under the Defense Production Act, in conjunction with the Department of Energy and Agriculture, including appropriated funding. It also provides the status of recent legislative actions related to DOD alternative fuels efforts.

For further discussion of the Navy's biofuel production efforts under the Defense Production Act, including previous defense-related fuel programs and the statutory authority of the DPA for energy initiatives, please see CRS Report R42568, *The Navy Biofuel Initiative Under the Defense Production Act*, by Anthony Andrews et al. For a comprehensive overview of the Department of Defense's operational energy efforts, including biofuels, please see CRS Report R42558, *Department of Defense Energy Initiatives: Background and Issues for Congress*.

DOD Alternative Fuels Policy

Section 314 of the FY2012 National Defense Authorization Act[1] gave responsibility for and oversight of DOD's alternative fuels initiatives and policy to the Assistant Secretary of Defense for Operational Energy Plans and Programs.[2] Previously, there was no specific responsibility or oversight of alternative fuel policy and initiatives at the DOD-wide level. The statute requires that the Assistant Secretary of Defense for Operational Plans and Programs

- lead DOD's alternative fuel activities;
- oversee DOD's alternative fuel investments;
- make recommendations regarding the development of alternative fuels by the military departments and the Office of the Secretary of Defense;

[1] P.L. 112-81

[2] §902 of the FY2009 Duncan Hunter National Defense Authorization Act established the position of Director of Operational Energy Plans and Programs (OEPP). The FY2011 Ike Skelton National Defense Authorization Act redesignated the position as an Assistant Secretary of Defense. The position is now codified at 10 U.S.C. 138c

- issue guidelines and prescribe policy to streamline alternative fuels investments across DOD; and
- encourage collaboration and leverage the investments in alternative fuel development made by the Department of Energy, the Department of Agriculture, and other federal agencies to the benefit of DOD.

Policy Goals

On July 5, 2012, Assistant Secretary of Defense for Operational Energy Plans and Programs Sharon Burke issued a memorandum articulating the goals of DOD alternative fuels policy, which are to "ensure operational military readiness, improve battlespace effectiveness," and increase "the ability to use multiple, reliable fuel sources." Specific considerations for DOD investments in alternative fuels initiatives include "increased resilience against strategic supply disruptions; dampened effect[s] of petroleum price volatility, increased fuel options for operational commanders and ultimately increased expeditionary effectiveness."[3]

Pursuant to these goals, DOD officials have said that any alternative fuels for DOD operational use must:

- be "drop-in," that is, requiring no modification to existing engines;
- be cost-competitive with conventional petroleum fuels;
- be available in sufficient quantities;
- be derived from a non-food crop feedstock; and
- have lifecycle greenhouse gas emissions less than or equal to conventional petroleum fuels.[4]

Investments in Alternative Fuels

By statute,[5] DOD investments in alternative fuel activities must be certified as part of the annual operational energy budget certification process. The Assistant Secretary of Defense for Operational Energy Plans and Programs must review the services' proposed budgets, and certify whether these budgets are adequate to implement the operational energy strategy.[6] The annual operational energy report[7] must now incorporate alternative fuels initiatives, including descriptions, funding, and expenditures. Per the July 5, 2012, memorandum, future investments in alternative fuels will be subject to a "rigorous, merit-based evaluation." DOD alternative fuels development initiatives will generally follow three phases:

[3] Office of the Assistant Secretary of Defense, Operational Energy Plans and Programs. "Alternative Fuels Policy for Operational Platforms," July 5, 2012. http://energy.defense.gov/2012-7-5_DoD_Alternative_Fuels_Policy_for_Operational_Platforms.pdf For more information about how lifecycle greenhouse gas emissions of fuels are calculated, please see CRS Report R40460, *Calculation of Lifecycle Greenhouse Gas Emissions for the Renewable Fuel Standard (RFS)*, by Brent D. Yacobucci and Kelsi Bracmort.

[4] As required by §526 of the Energy Independence and Security Act (EISA) of 2007, P.L. 110-140.

[5] §314 of the FY2012 National Defense Authorization Act, P.L. 112-81.

[6] Created by §902 of the FY2009 National Defense Authorization Act, P.L. 110-417. For more details about the operational energy budget certification process, please see CRS Report R42558, *Department of Defense Energy Initiatives: Background and Issues for Congress*, by Moshe Schwartz, Katherine Blakeley, and Ronald O'Rourke.

[7] Required by §331 of the FY2009 National Defense Authorization Act, P.L. 110-417.

Phase 1: Certification: A cross-services fuels working group is required to submit an annual plan that identifies promising alternative fuels and coordinates certification efforts by the services.

Phase 2: Field Demonstration: The services may propose a field demonstration of a new fuel. Depending on the funding source the proposal will be reviewed by the Office of the Assistant Secretary of Defense for Operational Energy Plans and Programs during the annual operational energy budget certification process, or jointly by that office and the Office of the Secretary of Defense Comptroller, Logistics and Materiel Readiness.

Phase 3: Ongoing Purchases: For purchases of operational quantities of fuels, alternative fuels will compete with petroleum products, and awards will be based on "the ability to meet requirements at best value to the government, including cost."[8]

Service Goals for Use of Alternative Fuels

Each of the military services has set goals regarding alternative fuels.

The **Army** has not adopted any specific alternative fuel goals. However, the Army does have the broad goal of increasing the use of renewable/alternative energy, set out in the Army Energy Security Implementation Strategy. The Army's Tactical Fuel and Energy Implementation Plan study, released in 2010, recommended the following goals in order to meet this aim of increased renewable/alternative energy: by 2028, at least 25% of energy used for tactical level power generation derived from alternative and renewable sources, and by 2028, 50% of the fuel requirement in the training base for the tactical mobility fleet (surface and air) met by alternative fuel blends.[9]

The **Air Force** has set a goal of being prepared to "cost-competitively acquire 50% of the Air Force's domestic aviation fuel requirements via an alternative fuel blend in which the alternative component is derived from domestic sources produced in a manner that is greener than fuels produced from conventional petroleum" by 2016.[10] In order to be prepared to use alternative fuels, should they become cost competitive, the Air Force has an additional goal of testing and certifying all aircraft and systems on a 50:50 alternative fuel blend[11] by 2012.[12] (See the Air Force portion of the section "Alternative Fuels Testing and Evaluation" for more details.)

The **Navy** has set more ambitious goals related to alternative fuels, as part of the Navy's five energy goals.[13] One goal is to deploy a "Great Green Fleet" strike group of ships and aircraft running entirely on alternative fuel blends by 2016. This "Great Green Fleet," demonstrated during the July 2012 RIMPAC

[8] Office of the Assistant Secretary of Defense, Operational Energy Plans and Programs. "Alternative Fuels Policy for Operational Platforms," July 5, 2012.

[9] AR 5-5 Study, "Tactical Fuel and Energy Implementation Plan," prepared on behalf of the U.S. Army Sustainment Center for Excellence by Expeditionary Logistics, Inc. and sponsored by the U.S. Army Combined Arms Support Command. September 24, 2010. Available at http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA529051

[10] Air Force HQ. "Air Force Energy Plan 2030."

[11] A 50:50 alternative fuel blend is fuel that consists of 50% conventional (i.e., petroleum-based) fuel and 50% alternative (i.e., non-petroleum-based) fuel.

[12] U.S. Air Force Briefing, "Air Force Energy Consumption," March 6, 2012. The original target date for completing testing and certifying had been 2011. U.S. Air Force, "Air Force Energy Plan 2010," December 9, 2009, p. 8.

[13] The Department of the Navy. "The Department of the Navy's Energy Goals." http://www.navy.mil/features/Navy_EnergySecurity.pdf

naval exercises, is a carrier strike group composed of nuclear-powered ships, ships running on a biofuel blend, and aircraft flying on a biofuel blend.

A second Navy goal is meeting 50% of the Navy's total energy consumption from alternative sources by 2020. To meet this goal for the Navy's use of energy afloat, the Navy plans to reduce its liquid fuel usage afloat to 38 million barrels of oil equivalent per year. Nuclear power is projected to provide 11 million barrels of oil equivalent in 2020. Therefore, to meet the goal of 50% alternative energy (18 million barrels of oil equivalent in 2020), approximately 8 million barrels of petroleum used afloat would need to be replaced by unblended alternative fuels by 2020.

DOD Alternative Fuel Purchases

Since 2007, DLA Energy has procured approximately 1.9 million gallons of various types of alternative fuels on behalf of the Army, Navy, and Air Force using funds provided by the services. DOD purchases of alternative fuels in order to test engine performance and certify alternative fuels for use in service fleets have totaled about $48 million to date. **Table 1** provides an overview of each service's alternative fuels purchases from 2007 through the present.

Table 1. Alternative Fuels Purchases by Service, 2007-November 2012

Service	Total Gallons Purchased	Total Cost	Average Cost Per Gallon
Army	49,950	$1,632,120	$ 37.14
Navy	676,500	$20,618,450	$ 30.15
Air Force	1,166,000	$25,719,650	$ 22.06
Total	**1,888,450**	**$47,970,220**	**$ 25.43**

Source: Data from DLA-E, November 9, 2012.

Notes: The average cost per gallon was calculated by dividing the total spending of each service on alternative fuels by number of gallons purchased. Values are not adjusted for inflation.

As of November 26, 2012, the Navy has not exercised its two options to purchase an additional 50,000 gallons of DSH fuel at a cost of $25.73 per gallon from Amyris, for a total cost of $1,286,500.

The services have purchased various types of alternative fuels, including Fischer-Tropsch fuels[14] derived from coal and natural gas, and three types of biofuels (hydrotreated jet and diesel biofuels,[15] alcohol-to-jet fuels, and direct-sugar-to-hydrocarbons fuels).[16] All services have purchased various types of hydrotreated jet and diesel biofuels. The Air Force has also purchased alcohol-to-jet fuels derived from both petroleum and biomass feedstocks. The Navy has purchased some direct-sugar-to-hydrocarbons fuel, derived from bio-based feedstocks. The Air Force has also purchased fuels created via the Fischer-

[14] The Fischer-Tropsch process is a series of chemical reactions can be used to create liquid fuels from coal, natural gas, or biomass feedstocks.

[15] Hydrotreated jet and diesel biofuels are the more common terms for HEFA (**H**ydroprocessed **E**sters, waste oil feedstocks and **F**atty **A**cids) fuels. These fuels can be created from feedstocks that produce natural oils, such as algae, jatropha and camelina , or from waste animal fats.

[16] For discussion of different types of alternative fuels, please see CRS Report R41460, *Cellulosic Ethanol: Feedstocks, Conversion Technologies, Economics, and Policy Options*, by Randy Schnepf; CRS Report R41282, *Agriculture-Based Biofuels: Overview and Emerging Issues*, by Randy Schnepf; or CRS Report R42122, *Algae's Potential as a Transportation Biofuel*, by Kelsi Bracmort.

Tropsch process from coal and natural gas. **Table 2** provides an overview of DOD alternative fuel purchases by fuel type.

Table 2. Alternative Fuel Purchases by Fuel Type, 2007-November 2012

Fuel Type	Gallons	Average cost per gallon	Total Spending
Hydrotreated Renewable Jet (HRJ)/Hydrotreated Renewable Diesel (HRD) both Hydroprocessed Esters and Fatty Acids (HEFA) fuels	1,085,450	$38.26	$41,534,620
Fischer-Tropsch (FT)	730,000	$3.76	$2,745,650
Alcohol-to-Jet (ATJ)	56,000	$59.00	$3,304,000
Direct Sugar to Hydrocarbon (DSH)	15,000	$25.73	$385,950
Total	**1,606,450**		**$47,970,220**

Source: DLA-E, November 9, 2012.

Notes: It is difficult to compare the costs per gallon of various purchases, even within the same type of fuel, as purchases may use different feedstocks or production pathways. Additionally, the contracts may include R&D costs in addition to the production costs of the fuel.

The Energy Independence and Security Act of 2007[17] prohibits federal agencies, including DOD, from procuring alternative fuels that have lifecycle greenhouse gas emissions greater than or equal to the emissions from the equivalent conventional petroleum fuel, except for research or testing purposes. As such, coal-to-liquid fuels, which have lifecycle greenhouse gas emissions of approximately 2.5 times those of petroleum fuels, would likely not be able to be purchased in operational quantities.

An overview of DOD's alternative fuel purchases to date is in **Table A-1** in Appendix A.

Alternative Fuels Testing and Evaluation

As part of their alternative fuels initiatives, the Army, Navy, and Air Force have been testing various alternative fuel blends in their equipment, for the potential certification of alternative fuels for fleet-wide use.

Army

The Army is currently testing 50:50 blends of Fischer-Tropsch synthetic paraffinic kerosene and hydrotreated renewable jet with JP-8 for use in all Army ground systems and field generators, with the goal of certifying these fuels by 2014.[18] The Army is also working to obtain Air Force certification for H-60 Black Hawk helicopters to fly on the 50:50 FT-SPK: JP-8 blend.

As part of the Army's 2009 Army Energy Security Implementation Strategy, the Army intends to complete testing of tactical ground equipment systems for which alternative or renewable fuels and synthetic fuel blend evaluations are completed by the end of FY2014. For Army engine and aviation

[17] P.L. 110-140.

[18] Department of Defense, *Opportunities for DOD use of Alternative and Renewable Fuels: FY10 NDAA Section 334 Congressional Study*, July 18, 2011. p. 4-10.

systems for which alternative or renewable fuels and synthetic fuel blend evaluations are completed, the Army intends to complete 50% of testing by the end of FY2014 and 100% by the end of FY2016.[19]

Air Force

The Air Force has certified Fischer-Tropsch fuel blends for use in its manned and unmanned fleets. Testing has been completed on biofuels, such as the HEFA fuels described above, and fleet-wide certification is expected shortly. The Air Force has also begun testing alcohol-to-jet fuels, with the inaugural flight of an A-10 Thunderbolt II jet on an ATJ-conventional fuel blend on June 28, 2012. According to the Air Force, this test flight was the first flight powered by an ATJ-conventional fuel blend.[20]

Navy

In April 2010, the "Green Hornet" F/A-18 was the first Navy jet to fly on a biofuel blend. The Navy has tested HEFA 50:50 biofuel blends (also known as hydrotreated renewable jet [HRJ]) for use in all manned and unmanned aircraft. Testing of 50:50 HEFA fuel blends for ships (also known as HRD, or hydrotreated renewable diesel) is complete except for one type of diesel generator. The Navy anticipates certification for all HEFA fuels in early 2013. Testing and certification of Fischer-Tropsch fuels is expected to be completed by the end of 2013. Testing of other alternative fuels, such as alcohol-to-jet, pyrolysis oils, and direct sugar to hydrocarbon, will continue in the future.[21]

Navy Biofuel Production Under the Defense Production Act

Under the authority of the Defense Production Act, in June 2011, the Departments of the Navy, Energy, and Agriculture signed a Memorandum of Understanding (MOU) to "assist the development and support of a sustainable commercial biofuels industry."[22] The MOU argues that because of the current economic environment, start-up risks, and competitive barriers posed by the established crude oil market, without government investment, adequate domestic production capacity of advanced drop-in biofuels will not be achieved in a timely manner.[23]

The MOU calls for the Navy, the Department of Energy, and the Department of Agriculture to support advanced drop-in biofuel plants and refineries to produce advanced biofuels that

[19] Department of Defense, *Opportunities for DOD use of Alternative and Renewable Fuels: FY10 NDAA Section 334 Congressional Study*, July 18, 2011. p. 4-10.

[20] Minty Knighton, "A-10 first aircraft to use alcohol-based fuel," *Air Force Print News Today*, July 2, 2012, http://www.af.mil/news/story_print.asp?id=123308337.

[21] Discussion with Navy energy official, October 2, 2012.

[22] Memorandum of Understanding Between the Department of the Navy and the Department of Energy and the Department of Agriculture, June 2011, p. 1. Available at http://www.rurdev.usda.gov/SupportDocuments/DPASignedMOUEnergyNavyUSDA.pdf

[23] Memorandum of Understanding Between the Department of the Navy and the Department of Energy and the Department of Agriculture, June 2011, p. 2. Available at http://www.rurdev.usda.gov/SupportDocuments/DPASignedMOUEnergyNavyUSDA.pdf

- meet military specifications;
- are price competitive with petroleum;
- are at geographically diverse locations with ready market access; and
- have no significant impact on the food supply.[24]

According to the MOU, total government funding for this project is anticipated at $510 million over a period of three years, with $170 million each from the Navy, the Department of Energy, and the Department of Agriculture.[25] For discussion of the authority of the Defense Production Act as it relates to energy and biofuels, please see CRS Report R42568, *The Navy Biofuel Initiative Under the Defense Production Act*, by Anthony Andrews et al.

Funding Opportunity Announcement

The Funding Opportunity Announcement (FOA-12-15-PKM) for this biofuels production initiative under this MOU was initially released on June 27, 2012, with an announced government funding amount of $210 million. Awards for biofuels production facilities are planned to occur in two phases:

Phase 1: approximately five awards of up to $6 million each for planning and preliminary designs for biofuel production facilities. Phase 1 awards are expected to be announced in March 2013.

Phase 2: up to three awards of up to $70 million each for construction, commissioning, and performance testing of biofuel production facilities.

Requirements for a successful proposal include

- at least 50% cost share for both Phase 1 and Phase 2;
- domestic production of advanced biofuels, including domestic sourcing of feedstocks;
- compliance with Section 527 of the Energy Security and Independence Act of 2007;[26]
- use of an acceptable renewable feedstock;
- production of a drop-in fuel; and
- a production capacity of at least 10 million gallons a year.

The stated FOA funding level of $210 million includes

- $100 million from DOD, funded via the $150 million appropriated for the DPA Fund in the FY2012 Department of Defense Appropriations Act;[27]

[24] Memorandum of Understanding Between the Department of the Navy and the Department of Energy and the Department of Agriculture, June 2011, p. 2. Available at http://www.rurdev.usda.gov/SupportDocuments/DPASignedMOUEnergyNavyUSDA.pdf

[25] Memorandum of Understanding Between the Department of the Navy and the Department of Energy and the Department of Agriculture, June 2011, pp. 2-3. Available at http://www.rurdev.usda.gov/SupportDocuments/DPASignedMOUEnergyNavyUSDA.pdf

[26] P.L. 100-140.

[27] Enacted as the Consolidated Appropriations Act, 2012, P.L. 112-74.

- $70 million of requested funding for the Navy's drop-in biofuels production initiative as part of the $89 million request for the DPA fund in the DOD's FY2013 budget request;[28] and
- $40 million from DOE following the receipt of the authority, requested in DOE's FY2013 budget request,[29] to transfer monies from DOE Energy Efficiency and Renewable Energy appropriated funds into the DPA Fund to support the MOU between the Navy, DOE, and USDA.

It does not include $171 million of USDA funding via the Commodity Credit Corporation to subsidize the production of bio-based jet fuel,[30] under the broader authority granted to USDA and the Commodity Credit Corporation to increase the use of agricultural commodities under the Commodity Credit Corporation Charter Act.[31] The Corporation has the authority to borrow up to $30 billion directly from the Treasury or from private lenders, to be repaid, with interest, through appropriations from Congress. This borrowing authority does not require specific congressional appropriations.

Table 3. Funding Sources for the Navy, DOE and USDA Biofuel Production Initiative

	Defense Production Act Fund					Commodity Credit Corporation	Total
	FY2012	FY2013	FY2014	FY2015	Subtotal		
DOD/Navy	$100m	$70m (requested)	--	--	$170m	--	$170m

[28] Office of the Secretary of Defense, "Department of Defense Fiscal Year (FY) 2013 President's Budget Submission, Justification Book Defense: Production Act Purchases," February 2012, p. 2. http://comptroller.defense.gov/defbudget/fy2013/budget_justification/pdfs/02_Procurement/Office_of_Defense_Production_Act_PB_2013.pdf

[29] Department of Energy, "FY2013 Congressional Budget Request.," Vol. 3. Office of the Chief Financial Officer, February 2012. Energy Efficiency and Renewable Energy: Biomass and Biorefinery Systems Program. p. 40.

[30] U.S. Department of Agriculture, U.S. Department of Agriculture, USDA FY2013 Budget Summary and Annual Performance Plan, February 2012. The Commodity Credit Corporation is the funding mechanism for the mandatory farm commodity program payments that farmers receive from the USDA Farm Service Agency, and some of the conservation payments from the Natural Resources Conservation Service and the Farm Service Agency. The Commodity Credit Corporation also is or has been the funding source for a relatively small subset of USDA programs for foreign trade, bioenergy, rural development, agricultural research, and other programs. The Commodity Credit Corporation has the authority to borrow up to $30b directly from the Treasury or from private lenders, to be repaid, with interest, through appropriations from Congress. This borrowing authority does not require specific congressional appropriations. For more information about the CCC, please see CRS Report R41245, *Reductions in Mandatory Agriculture Program Spending*, by Jim Monke and Megan Stubbs. http://www.obpa.usda.gov/budsum/FY13budsum.pdf. p. 21.

[31] P.L. 80-806. From the USDA FY2013 Budget Summary and Annual Performance Plan, "Section 4(e) of the CCC Charter Act authorizes CCC to take action to increase the use of agricultural commodities by "…aiding in the development of new and additional markets, marketing facilities, and uses for such commodities." Under this authority, CCC will make available up to $171 million to subsidize the production of bio-based jet fuel. Because there is no existing viable commercial source for the large-scale production of such fuel, CCC has entered into an agreement with the Department of Energy and the Navy to assist in the development of this product." p. 23. For more information regarding USDA's authority to engage in renewable energy programs, please see CRS Report R41985, *Renewable Energy Programs and the Farm Bill: Status and Issues*, by Randy Schnepf.

	Defense Production Act Fund					Commodity Credit Corporation	Total
	FY2012	FY2013	FY2014	FY2015	Subtotal		
Department of Energy	--	$40m (requested)	total of $130m across FY2014 and FY2015 (to be requested)		$170m	--	$170m
Department of Agriculture	--	--	--	--	--	$171m	$171m
Total Funding to date:		**$210m** (anticipated, as per the Funding Opportunity Announcement)					**$511m** (anticipated)

Source: Navy energy officials, October 2012.

Notes: DOD and DOE funding requests and amounts for FY2013 can be found in their respective annual budget requests and appropriations bills. The Commodity Credit Corporation has the authority to borrow up to $30 billion directly from the Treasury or from private lenders, to be repaid, with interest, through appropriations from Congress. This borrowing authority does not require specific congressional appropriations. According to Navy officials, the appropriations requests for the balance of the DOE's $170 million funding share after FY2013, $130 million, will be divided between FY2014 and FY2015 requests. The amounts to be requested in each year are not yet known.

Legislative Activity in 2012

Legislative activity in 2012 related to DOD's alternative fuels efforts has focused on two areas: (1) proposals to expand or limit DOD's ability to purchase alternative fuels and invest in alternative fuel production capability, and (2) appropriations related to the Navy's biofuel production efforts under the DPA.

H.R. 4310 as passed by the House on May 28, 2012, contains two provisions (Section 313 and Section 314) that would exempt DOD from Section 526 of EISA (which requires all alternative fuels purchased by the federal government for operational use to have lifecycle greenhouse gas emissions less than or equal to those from conventional fuels) and limit its ability to purchase alternative fuels that are more expensive than comparable petroleum fuels, respectively.

S. 3254, as passed by the Senate on December 4, 2012, does not contain any provisions that would restrict DOD's abilities to purchase alternative fuels or invest in biofuels production capability. Two restrictive provisions added via amendments during the Senate Armed Services Committee markup (Section 314 and Section 2823, as reported June 4, 2012) were removed by S.Amdt. 2985 and S.Amdt. 3095 during floor debate.

The Departments of Defense and Energy have also requested $70 million and $40 million in appropriations for FY2013 to fund the joint Departments of Defense, Energy, and Agriculture biofuels production initiative under the Defense Production Act.

Exempting DOD from Section 526 of EISA 2007

Section 313 of the House version of the FY2013 NDAA, H.R. 4310, would exempt DOD from Section 526 of EISA 2007, which requires all alternative fuels purchased by the federal government for operational use to have lifecycle greenhouse gas emissions less than or equal to those from conventional fuels.[32]

The Senate version (S. 3254, as reported to the Senate Armed Services Committee), did not contain this provision. A similar amendment to exempt DOD from Section 526 of EISA 2007, sponsored by Senator Inhofe, failed in the Senate Armed Services Committee markup of S. 3254 on a 13-13 vote.

Prohibition on Procuring or Producing Alternative Fuel that is more Costly than Conventional Fuel

Section 314 of H.R. 4310 would prohibit DOD from procuring or producing alternative fuel with FY2013 funds where the cost of the alternative fuel exceeds the comparable conventional fuel. This section exempts 50:50 alternative fuel blends purchased to complete engine or fleet certification of alternative fuel blends from this requirement.

S. 3254, as reported by the Senate Armed Services Committee, contained an identical provision to Section 313 of H.R. 4310, Section 314. This section was the result of an amendment sponsored by Senator Inhofe and passed by the Senate Armed Services Committee 13-12.

This section was struck during floor debate of the National Defense Authorization Act, following the passage of S.Amdt. 2985, sponsored by Senator Mark Udall. This amendment passed 62-37.

Prohibition on DOD Investment in Biofuel Refineries

Section 2823 of S. 3254, as reported by the Senate Armed Services Committee, would prohibit DOD from "enter[ing] into a contract to plan, design, refurbish, or construct a biofuels refinery or any other facility or infrastructure used to refine biofuels unless ... specifically authorized by law." This section was an amendment sponsored by Senator McCain and passed 13-12 by the Senate Armed Services committee.

DOD reportedly opposed this provision. In a letter from late October, the DOD stated that it "opposes the Senate provision because it would restrict the department's ability to contribute to the development of a domestic capability to produce cost-competitive advanced drop-in biofuels on a commercial scale, which is vitally important to our long-term national security.... Such a capability could increase the department's resilience against potential supply disruptions and price volatility of petroleum products."[33]

This provision was struck from S. 3254 by S.Amdt. 3095, sponsored by Senator Hagan, which passed 54-41.

[32] §526, Energy Independence and Security Act of 2007, P.L. 100-140.

[33] Jason Sherman, "Pentagon Seeks Repeal of Senate Provision that Threatens DOD's Biofuel Plan," *Inside Defense*, November 12, 2012. http://insidedefense.com/201211122415934/Inside-Defense-Daily-News/DefenseAlert/pentagon-seeks-repeal-of-senate-provision-that-threatens-dods-biofuels-plan/menu-id-61.html

DOD and DOE Appropriations for Biofuels Production Initiative

The Navy and the Department of Energy shares of the MOU with the Department of Agriculture to assist the development of a commercial-scale domestic advanced biofuel industry rely on appropriated funds. The USDA portion of the funds would be provided through the Commodity Credit Corporation.

For FY2013, the Navy requested $70 million for advanced drop-in biofuels production, as part of the $89 million total requested appropriations to the Defense Production Act Fund.[34] The House Appropriations Committee report on FY2013 Department of Defense Appropriations Act (H.R. 5856, H.Rept. 112-493) declined to fund the $70 million requested for the joint biofuel production initiative as part of the DPA Fund. As passed by the House on July 19, 2012, H.R. 5856 contains $63.5 million in DPA funding to remain available until expended. The corresponding Senate Appropriations Committee report (S.Rept. 112-196) recommends funding the overall DPA Fund at $100 million over the amount requested in the budget submission, for a total of $189 million, with no specific mention of biofuel production.

For FY2013, DOE requested the authority to transfer $40 million from its Energy Efficiency and Renewable Energy appropriations into the Defense Production Act Fund. The House-passed version of the FY2013 Energy and Water Development and Related Agencies Appropriations Act (H.R. 5325, as passed on June 6, 2012) does not include any language authorizing the Department of Energy to transfer money into the Defense Production Act Fund, while the Senate version (S. 2465, as reported on April 26, 2012) allows the Department of Energy to transfer up to $100 million of Energy Efficiency and Renewable Energy funds into the Defense Production Act Fund.

For a more detailed history of recent legislative action, please see **Appendix B**.

Questions for Congress

DOD and the services' alternative fuels initiatives raise several potential oversight questions and issues for Congress, including the following:

Benefits and Costs of Alternative Fuels

- What benefits for the services do alternative fuels offer over conventional petroleum fuels? Are there alternative ways to achieve these benefits?
- Should these alternative fuel efforts be viewed in terms of their potential benefits to the services, or in terms of their potential benefits to the nation?
- How much funding should be invested in the services' alternative fuels testing and certification efforts?
- To what extent are the services coordinating their alternative fuels testing and certification efforts to prevent duplication of effort?

[34] Department of Defense, FY2013 President's Budget Submission. "Defense Production Act Purchases Justification Book." February 2012. pg. iv. Available at http://comptroller.defense.gov/defbudget/fy2013/budget_justification/pdfs/02_Procurement/Office_of_Defense_Production_Act_PB_2013.pdf

Navy Role in Developing Advanced Biofuels

- What analysis by the Navy, DOE and USDA supports the Navy's conclusion that this $510 million investment would positively impact the domestic advanced biofuel industry?
- Should biofuel investment be left to private industry (e.g., commercial aviation) or other government agencies such as the Department of Energy or the Department of Agriculture?
- Why is the DOD effort to jumpstart a domestic advanced biofuels industry being led by the Navy?

DOD Coordination of Service Alternative Fuel Initiatives

- How well is the office of the Assistant Secretary of Defense for Operational Energy Plans and Programs (ASD(OEPP))[35] coordinating the alternative fuel goals of the military services?
- How is ASD(OEPP) overseeing current investments by the military services in alternative fuels testing and certification? Is ASD(OEPP)'s oversight authority, including the required budget certification process, adequate?
- Has ASD(OEPP)'s coordination activities or alternative fuels guidance and policy affected the alternative fuel goals and initiatives of the military services? If so, what have been these changes?

Coordination of Alternative Fuel Initiatives between DOD and Other Federal Agencies

- Is there overlap or duplication between DOD's alternative fuel initiatives and the alternative fuel initiatives being pursued by other federal agencies?
- Does the executive branch use a process to coordinate alternative fuel and other energy initiatives across all federal agencies? If so, what are the steps of this process and what criteria are used to determine whether an initiative should be pursued by DOD or some other federal agency?

[35] This office was created as the Director of Operational Energy Plans and Programs via §902 of the FY2009 NDAA (P.L. 110-417. §902 of the FY2011 NDAA (P.L. 111-383) designated the position as an Assistant Secretary of Defense. This office was given the responsibility of leading and overseeing DOD's alternative fuel activities, issuing guidelines and policy to streamline alternative fuels investment across DOD and making recommendations regarding the development of alternative fuels by the military departments and the Office of the Secretary of Defense by §314 of the FY2012 NDAA (P.L. 112-81).

Appendix A. DOD Alternative Fuel Contracts to Date

Table A-1. DOD Alternative Fuel Contracts, 2007-November 2012

Contract Number	Company	Product	Contract Award Data or Option Date	Gallons	Cost per Gallon	Total Cost	Feedstock	Service	Funding Source
07-D-0486	Shell	FT Iso Paraffinic Kerosene	6-Jun-07	315,000	$3.41	$1,074,150	Natural Gas	Air Force	Air Force RDT&E
08-D-0496	SASOL	FT Iso Paraffinic Kerosene	26-Jun-08	60,000	$3.75	$225,000	Coal	Air Force	Air Force RDT&E
08-D-0497	SASOL	FT Iso Paraffinic Kerosene	3-Jul-08	335,000	$3.90	$1,306,500	Coal	Air Force	Air Force RDT&E
09-D-0519	Sustainable Oils	HRJ5	31-Aug-09	40,000	$66.60	$2,664,000	Camelina	Navy	Navy & DLA ARRA RDT&E[a]
09-D-0518	Solazyme	HRJ5	1-Sep-09	1,500	$149.00	$223,500	Algal Oil	Navy	DLA ARRA RDT&E
09-D-0520	Sustainable Oils	HRJ8	15-Sep-09	100,000	$66.80	$6,680,000	Camelina	Air Force	Air Force RDT&E
09-D-0517	UOP	HRJ8	15-Sep-09	100,000	$64.00	$6,400,000	Tallow	Air Force	Air Force RDT&E
09-D-0523	PM Group Int'l	FT F76	30-Sep-09	20,000	$7.00	$140,000	Nat Gas	Navy	Navy RDT&E
10-D-0489	Sustainable Oils	HRJ8	26-Jul-10	34,950	$38.60	$1,349,070	Camelina	Army	DLA ARRA RDT&E
Option	Sustainable Oils	HRJ5	29-Jun-10	150,000	$34.45	$5,167,500	Camelina	Navy	Navy RDT&E; DLA ARRA RDT&E
Option	Sustainable Oils	HRJ8	31-Aug-10	100,000	$34.90	$3,490,000	Camelina	Air Force	Air Force RDT&E

Contract Number	Company	Product	Contract Award Data or Option Date	Gallons	Cost per Gallon	Total Cost	Feedstock	Service	Funding Source
Option	UOP	HRJ8	31-Aug-10	100,000	$32.40	$3,240,000	Tallow	Air Force	Air Force RDT&E
11-D-0526	Gevo	ATJ8	23-Sep-11	7,000	$59.00	$413,000	Alcohols	Air Force	Air Force RDT&E
Option	Gevo	ATJ8	28-Sep-11	4,000	$59.00	$236,000	Alcohols	Air Force	Air Force RDT&E
11-D-0530	UOP	HRJ8	30-Sep-11	4,500	$33.00	$148,500	Camelina	Army	Army RDT&E
12-D-0549	Dynamic	HRD76	30-Nov-11	350,000	$26.75	$9,362,500	UCO/Algal	Navy	Navy OM&N
12-D-0549	Dynamic	HRJ5	30-Nov-11	100,000	$26.75	$2,675,000	UCO/Algal	Navy	Navy OM&N
12-D-0559	UOP	HRJ8	2-May-12	4,500	$29.90	$ 134,550	UCO/ICO	Army	Army RDT&E
12-D-0560	Amyris	DSH76	27-Sep-12	15,000	$25.73	$ 385,950	Ferm. Sugar	Navy	Navy RDT&E
Option	Amyris	DSH76	TBD	25,000	$25.73	$ 643,250	Ferm. Sugar	Navy	Navy RDT&E
Option	Amyris	DSH76	TBD	25,000	$25.73	$ 643,250	Ferm. Sugar	Navy	Navy RDT&E
12-D-0561	Gevo	ATJ8	27-Sep-12	30,000	$59.00	$ 1,770,000	Alcohols	Air Force	Air Force RDT&E
Option	Gevo	ATJ8	27-Sep-12	15,000	$59.00	$ 885,000	Alcohols	Air Force	Air Force RDT&E
TOTAL:				**1,886,450**		**$47,970,220**			

Source: Data from DLA-E, November 9, 2012.

Note: As of November 26, 2012, the Navy has not exercised its two options to purchase a total of 50,000 additional gallons of DSH fuel at a cost of $25.73 per gallon from Amyris, for a total cost of $1,286,500. If the Navy exercises these options, DOD purchases of biofuels to date will total 1,936,450 gallons at a total cost of $49,256,720.

a. DLA ARRA RDT&E refers to funds from the American Recovery and Reinvestment Act of 2009 (P.L. 111-5).

Appendix B. Recent Legislative Action

FY2012 Department of Defense Appropriations Act (P.L. 112-74)

The FY2012 Department of Defense Appropriations Act (combined into the Consolidated Appropriations Act of FY2012 [H.R. 2055/P.L. 112-74]) included $150 million in appropriated funds to support DPA Title III funding. While not specifically directing this additional $150 million of DPA Title III funding to biofuels production, both the House and Senate accompanying reports were supportive of DOD biofuels initiatives and encouraged longer contract terms for biofuels procurement. The Senate Appropriations Committee report (S.Rept. 112-77 of September 15, 2011, accompanying H.R. 2219) stated:

> *Long-term Contracts*.—The Committee is encouraged by the Department's biofuels initiatives such as the Green Fleet program; however, the Committee is concerned that the Department lacks the long-term contracting ability to ensure that adequate biofuels are produced. To address this issue, the Department may fund multi-year contracts with purchase periods up to 15 years for biofuels products in order to maximize efficiencies of scale for the best purchase price. (page 160).

The House Appropriations Committee report (H.Rept. 112-331 of December 15, 2011, accompanying H.R. 2055), stated:

> LONG TERM CONTRACTS
>
> The conferees believe that the time and money being invested by the Department of Defense in biofuels and alternative energy will reap dividends not only for the Nation's armed forces, but eventually for the Nation itself. The conferees want the Department to be in the best position possible to take advantage of the expected breakthroughs in this area and encourage the Department to eventually pursue extended multi-year contracts, pursuant to the Financial Management Regulation, for biofuel products in order to maximize efficiencies of scale for the best purchase price. (p. 671)

FY2013 Department of Energy Appropriations Act (H.R. 5325/S. 2465)

In its FY2013 Congressional Budget Request, the Department of Energy (DOE) requested authority to transfer funds to the DPA Fund, offering the justification that it will support the MOU with the technical expertise to move pilot-scale demonstration projects to larger-scale production.[36]

The House-passed version of the Energy and Water Development and Related Agencies Appropriations Act, FY2013, (H.R. 5325, as passed on June 6, 2012) did not include any language authorizing DOE to transfer money into the Defense Production Act Fund. The House Appropriations Committee, in its accompanying report (H.Rept. 112-462 of May 2, 2012),

[36] Department of Energy, "FY2013 Congressional Budget Request.," Vol. 3. Office of the Chief Financial Officer, February 2012. Energy Efficiency and Renewable Energy: Biomass and Biorefinery Systems Program. p. 40.

declined to fund and authorize the Department of Energy's portion of this joint initiative. The report states:

> *Biomass and Biorefinery Systems R&D.* — ... The Committee recommends $203,000,000 for Biomass and Biorefinery Systems R&D, $3,000,000 above fiscal year 2012 and $67,000,000 below the budget request. The Department is directed to continue conducting only research, development, and demonstration activities advancing technologies that can produce fuels and electricity from biomass and crops that could not otherwise be used as food. The budget request proposed funding and legislative language for a joint initiative with the Navy and the Department of Agriculture to develop commercial diesel and jet biofuels production capacity for defense purposes. The Department has not adequately justified why the Department of Energy should fund this Defense initiative, and whether the proposed investments can successfully lower costs to competitive levels in several years or will only serve to sink costs into a product that is too immature to compete without federal support. The recommendation includes no funding for the proposed initiative and does not include the requested legislative language. (p. 85-86)

In FY2013, the Senate Appropriations Committee Energy and Water Development and Related Agencies Appropriations Act (S. 2465, as reported on April 26, 2012) provides that, of the funds appropriated for Energy Efficiency and Renewable Energy, "the Secretary may transfer up to $100,000,000 to the Defense Production Act Fund for activities of the Department of Energy pursuant to the Defense Production Act of 1950 (50 U.S.C. App. 2061, et seq.)."

The accompanying report (S.Rept. 112-164 of April 26, 2012) includes language supportive of the DOD, DOE, and USDA joint biofuel production initiative. The report states:

> *Biomass and Biorefinery Systems R&D.*— The Committee recognizes that quality and reliability of supplies will be key in acceptance of advanced drop-in biofuels into the supply chain once they are demonstrated at a convincing scale. To that end, the Committee is supportive of the collaboration between the Navy, Department of Agriculture and DOE to develop innovative technologies for jet and diesel fuels for military uses. With the Department of Defense as an early adopter of these alternative fuels, the wider marketplace will be more likely to follow.

FY2013 National Defense Authorization Act (H.R. 4310/S. 3254)

H.R. 4310

Two provisions of H.R. 4310, as reported by the House Armed Services Committee (H.Rept. 112-479 of May 11, 2012), affect the Department of Defense's procurement and production of biofuels:

> SEC. 313. EXEMPTION OF DEPARTMENT OF DEFENSE FROM ALTERNATIVE FUEL PROCUREMENT REQUIREMENT.
>
> Section 526 of the Energy Independence and Security Act of 2007 (P.L. 110-140; 42 U.S.C. 17142) is amended by adding at the end the following: `This section shall not apply to the Department of Defense.'
>
> SEC. 314. LIMITATION ON AVAILABILITY OF FUNDS FOR PROCUREMENT OF ALTERNATIVE FUEL.

> (a) Limitation- Except as provided in subsection (b), none of the funds authorized to be appropriated by this Act or otherwise made available during fiscal year 2013 for the Department of Defense may be obligated or expended for the production or purchase of any alternative fuel if the cost of producing or purchasing the alternative fuel exceeds the cost of producing or purchasing a traditional fossil fuel that would be used for the same purpose as the alternative fuel.
>
> (b) Exception- Notwithstanding subsection (a), the Secretary of Defense may purchase such limited quantities of alternative fuels as are necessary to complete fleet certification for 50/50 blends. In such instances, the Secretary shall purchase such alternative fuel using competitive procedures and ensure the best purchase price for the fuel.

S. 3254

As passed by the Senate on December 4, 2012, S. 3254 does not contain any provisions that would restrict the ability of the Department of Defense to procure or produce biofuels.

Two provisions in S. 3254, as reported by the Senate Armed Services Committee (S.Rept. 112-173 of June 4, 2012), would have affected the Department of Defense's procurement and production of biofuels. Via floor amendments, both of these provisions were stricken from the version of S. 3254 that was passed by the Senate.

S.Amdt. 2985 was sponsored by Senator Mark Udall and co-sponsored by Senators Murray, Shaheen, Bingaman, Hagan, Kerry, Begich, and Tom Udall. This amendment, which passed 62-37, struck Section 313 from the version of S. 3254 as reported by the Senate Armed Services Committee. Section 313 would have limited the ability of the Department of Defense to purchase alternative fuels whose costs exceeds that of an equivalent traditional fossil fuel.

S.Amdt. 3095 was sponsored by Senator Hagan, and co-sponsored by Senators Johnson (SD), Murray, Shaheen, Collins, Schumer, Stabenow, Whitehouse, Coons, Udall (NM), Tester, and Udall (CO). This amendment, which passed 54-41, struck Section 2823 from the version of S. 3254 as reported by the Senate Armed Services Committee. Section 2823 would have prohibited the Department of Defense from entering into a contract to plan, design, refurbish, or construct biofuels refinery infrastructure unless specifically authorized by law.

These stricken sections were adopted by the Senate Armed Services Committee as amendments sponsored by Senator Inhofe and Senator McCain, respectively. These amendments were each approved in votes of 13-12. A third amendment, sponsored by Senator Inhofe, failed in the Senate Armed Services Committee on a tie vote of 13-13. This amendment would have exempted the Department of Defense from Section 526 of the Energy Independence and Security Act of 2007 (P.L. 110-140), which prohibits federal agencies from purchasing alternative fuels whose lifecycle greenhouse gas emissions exceed those of conventional fuels. This amendment was similar to Section 313 in H.R. 4310 as reported by the House Armed Services Committee on May 11, 2012, and passed by the House.

These two stricken sections, as they appeared in the version of S. 3254 that was reported by the Senate Armed Services Committee on June 4, 2012, are as follows:

> SEC. 313. LIMITATION ON AVAILABILITY OF FUNDS FOR PROCUREMENT OF ALTERNATIVE FUEL.

(a) Limitation- Except as provided in subsection (b), none of the funds authorized to be appropriated by this Act or otherwise made available during fiscal year 2013 for the Department of Defense may be obligated or expended for the production or sole purchase of an alternative fuel if the cost of producing or purchasing the alternative fuel exceeds the cost of producing or purchasing a traditional fossil fuel that would be used for the same purpose as the alternative fuel.

(b) Exception- Notwithstanding subsection (a), the Secretary of Defense may purchase such limited quantities of alternative fuels as are necessary to complete engine or fleet certification for 50/50 blends. In such instances, the Secretary shall purchase such alternative fuel using amounts authorized for research, development, test, and evaluation using competitive procedures and shall ensure the best purchase price for the fuel.

SEC. 2823. PROHIBITION ON BIOFUEL REFINERY CONSTRUCTION.

Notwithstanding any other provision of law, neither the Secretary of Defense nor any other official of the Department of Defense may enter into a contract to plan, design, refurbish, or construct a biofuels refinery or any other facility or infrastructure used to refine biofuels unless such planning, design, refurbishment, or construction is specifically authorized by law.

Regarding Section 313, S.Rept. 112-173 states:

Limitation on availability of funds for procurement of alternative fuel (sec. 313)

The committee recommends a provision that would prohibit the use of funds authorized to be appropriated to the Department of Defense in fiscal year 2013 from being obligated or expended for the production or sole purchase of an alternative fuel if the cost exceeds the cost of traditional fossil fuels used for the same purpose, except for continued testing purposes.

The committee notes that in December 2011, the Defense Logistics Agency, on behalf of the Department of the Navy, purchased 450,000 gallons of biofuels for $12.0 million, which equates to $26.66 a gallon. According to the Department of the Navy it was the single largest purchase of biofuel in government history and was carried out in order to "demonstrate the capability of a Carrier Strike Group and its air wing to burn alternative fuels." The Department of the Navy noted that, despite the use of operation and maintenance funds for the purchase, the demonstration is deemed a research, development, test, and evaluation (RDTE) initiative as justification for the higher cost per gallon.

The committee also notes that the Vice Chief of Naval Operations testified before the Subcommittee on Readiness and Management Support on May 10, 2012, regarding pressure on readiness accounts from increased fuel prices that "every $1 increase in the price per barrel of fuel results in approximately $31M of additional cost annually above our budgeted level." Therefore, the high cost of fuel has direct and detrimental impact on other readiness accounts.

The committee strongly supports initiatives undertaken by the Department of Defense to reduce the fuel demand of the operational forces through affordable new technologies that increase fuel efficiency and offer alternative sources of power. But given the pressure placed on current and future defense budgets, the committee is concerned about the use of operation and maintenance funds to pay significantly higher costs for biofuels being used for RDTE efforts. Therefore, the committee directs the Secretary of Defense to develop and promulgate guidance to the military services and defense agencies on the difference between the operational use of alternative fuels versus continued RDTE initiatives. (Pages 80-81)

FY2013 Department of Defense Appropriations Act (H.R. 5856)

For the 2013 fiscal year, The House Appropriations Committee, in its report (H.Rept. 112-493 of May 25, 2012, on H.R. 5856), states:

> ADVANCED DROP-IN BIOFUEL PRODUCTION
>
> The request [for Defense Production Act purchases] includes $70,000,000 for the construction or retrofit of domestic commercial (or pre-commercial) scale advanced drop-in biofuel plants and refineries. The Committee understands that the Department has allocated $100,000,000 of the $150,000,000 program addition to the fiscal year 2012 Defense Production Act account for this effort and that $70,000,000 of this funding likely will not execute until well into fiscal year 2013 or even into fiscal year 2014. While the Committee is supportive of alternative energy development, in these times of decreasing budgets, it does not seem prudent to stockpile funds so far ahead of need. Accordingly the recommendation provides no funding for this effort in fiscal year 2013. The Committee urges the Secretary of Defense to request this funding in future years when it can execute in a timely manner. (Page 203)

For the FY2013 fiscal year, the Senate Appropriations Committee, in its report (S.Rept. 112-196 of August 2, 2012, on H.R. 5856), provides for an additional $100 million for the DPA fund over the amount requested in the FY2013 budget request. The report states:

> Additional Funding - The Committee recognizes the critical role that the DPA title III program serves in strengthening the U.S. defense industrial base and believes that this work is in the national interest. Therefore, the Committee increases funding for DPA by $100,000,000 over the budget request. The Committee directs that the additional funding be competitively awarded to new initiatives and priority consideration should be given to completion of DPA projects initiated in prior years. Furthermore, the Committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to inform the congressional defense committees 30 days prior to any obligation or expenditure of these funds. (Page 164)

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